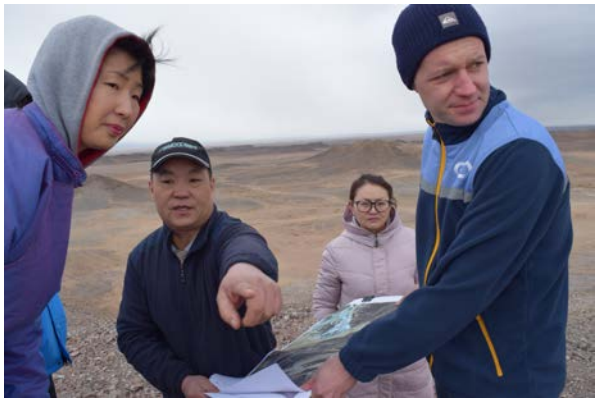
ENGAGING COMMUNITIES OF INTEREST

TO SECURE INPUT TO MINE DESIGN DECISIONS:

A RESEARCH REPORT



THE UNIVERSITY OF BRITISH COLUMBIA

Authors

Dr. Jocelyn Fraser, Post-Doctoral Research Fellow - School of Public Policy and Global Affairs, and NBK Institute of Mining Engineering, UBC
jocelyn.fraser@ubc.ca
Mr. Zorigtkhuu Bat-Erdene, MASc. Student – NBK Institute of Mining Engineering, UBC
zorigoo@mail.ubc.ca
Dr. Nadja Kunz, Assistant Professor– School of Public Policy and Global Affairs, and NBK Institute of Mining Engineering, UBC
nadja.kunz@ubc.ca

Acknowledgements

The research reported in this publication was supported by a Social Sciences and Humanities Research Council of Canada Partnership Engage Grant (SSHRC 892-2018-3087). The objectives of the Partnership Engage grants are to apply academic theory to real-world challenges and to involve companies in high-quality, independent research.

SSHRC Partnership Engage grants require an "Industry Partner". For this project, Erdene Resource Development Corporation (Erdene) was the industry partner. Erdene is a publicly traded Canada-based resource company (TSX: ERD; MSE: ERDN) focused on the acquisition, exploration, and development of precious and base metals in Mongolia. Erdene will take guidance from the research findings as the company continues its community engagement to support development of a proposed gold mine in Mongolia.

The research team would like to thank the Environment and Social Responsibility Society (ESRS) of the Canadian Institute of Mining, Metals and Petroleum (CIM) and the Social and Environmental Society of the Australia Institute for Mining and Metallurgy (AUSIMM) for support to execute the research survey and to publicize the findings for the benefit of their members. Thanks also to the Association of Mineral Exploration of British Columbia (AMEBC) for hosting one of the research events and to the Peruvian Canadian Chamber of Commerce for publicizing the research with their members.

Citation

Fraser, J.; Bat-Erdene, Z.; Kunz, N. (2019). *Engaging Communities of Interest to Secure Input to Mine Design Decisions: A Research Report*. The University of British Columbia: Vancouver, Canada.

Definitions

Some terms we use in this report and what we mean

Citizen engagement – meaningful engagement of individual citizens in program development; assumes an active role for citizens in defining issues, considering solutions, and identifying priorities for action.

Community engagement strategy – activities implemented by firms to work collaboratively with and through groups of people to address the social well-being of those people.

Community readiness – the capacity of the community to take advantage of resource development opportunities in proximity to the community.

Social chain of custody – is used to refer to the idea that within the life of a mining project -- from exploration to closure -- there needs to be an approach (a social chain of custody) to mitigate the socio-political risk arising from corporate mergers, acquisitions and transitions, and from company personnel changes.

Social License to Operate (SLO) – the ongoing acceptance of a company's business practices and operating procedures by government, communities, and other stakeholders or interested parties.

Rightsholders – individuals who have a legitimate claim to resource-rich lands.

Stakeholders – any person, group or organization that can place a claim on a company's attention, resources, or output.

Stakeholder theory – the idea that companies need to create value for all stakeholders.

Executive Summary

The research described in this report investigated approaches to community engagement used by mineral exploration and mining companies at the design stage of mining projects. The results of an online survey of practitioners and two expert panels led to the conclusion that there is no "best practice" approach for engagement. Instead, efforts must be context specific and tied to the needs and interests of project specific stakeholder groups and rightsholders.

The research sample was almost equally divided between those who work in house for mining and/or exploration companies and those who work for consultancies or in academia. Nearly 50%[1] of respondents who are in-house indicated they work in the community relations (17%) or environmental (34%) departments of their companies, giving them a good sightline on community engagement. When combined with the consultants, service providers, academics and others who answered the online survey questionnaire, the sample represents of a diversity of views and perspectives valuable for the research.

Almost a quarter of survey respondents (24%) felt that the most common approach to community engagement within the mineral exploration and mining sector was to inform: to provide the public with balanced and objective information to assist them in understanding the company's project/approach. However, almost an equal number (20%) felt companies tend to minimize engagement to no more than that which is required under applicable laws and regulations. With only 7% suggested that companies are partnering with the public in decisions it is clear there is room for improvement.

There were seven key findings from the research, described in more detail in the report:

1. The biggest challenge to engagement is earning stakeholder trust
2. Negotiating formal agreements with communities of interest is standard practice
3. Key Performance Indicators (KPIs) need improvement
4. Tracking community commitments is ad hoc for many
5. Community input to mine design remains limited
6. There is no single or dominant approach to community engagement
7. Engagement tools skew towards the tried and true.

[1] Other respondents worked in operations, planning, human resources, procurement, exploration, and group engineering

We conclude that “best practice” is highly contingent upon:

- The **intent** of the company - whether the company plans to inform, consult, involve, collaborate, or empower is more important than the engagement tactic being used
- The **human and financial resources** available to execute the chosen tactic
- The **time** allocated for engagement and the **quality** of the resulting program
- The **capacity** of the community to participate.

We predict the industry’s approach to engagement will continue to evolve in the coming years. The progression along the spectrum of engagement may arise from individual leadership, redefined corporate purpose, or as a risk management strategy. Increasing pressure from investors to deliver value to all stakeholders versus just corporate shareholders is also likely to be an important consideration.

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Introduction

For business and industry, engagement with a diverse range of actors – or stakeholders – is growing in importance. In August 2019, the Business Round Table, the most influential lobby group of corporate leaders in the United States, denounced the long-standing position that corporations exist principally to serve their shareholders, acknowledging that corporate purpose extends to beyond shareholders to stakeholders. (In some jurisdictions, indigenous people prefer to be recognized rightsholders, a term that more accurately reflects their ownership or guardianship of the land).

The need to engage stakeholders and rightsholders is no surprise to those in the global mineral exploration and mining industry. For the second year in a row, in 2019, senior mining executives responding to an annual survey on business risks[2] predicted that social license to operate (SLO) will be the mining industry's greatest challenge over the next few years.

There is wide acceptance within the mining sector that engagement is essential for ensuring regulatory compliance and for reducing social risk. It is also agreed that early engagement is important to build the relationships and trust required to earn social consent and to support sustainable outcomes for both mining companies and communities. Once a prospective ore deposit has been identified and consideration is being given to mine design options (for example, how to source water for operations, project infrastructure needs, options for energy supply, etc.) there is a further rationale for stakeholder engagement. Input to design decisions from communities located in proximity to the mineral discovery can provide valuable information on local conditions and can support outcomes that have a higher degree of community acceptance.

While it is recognized both within applied practice and academia that early engagement by mineral exploration and mining companies is important to support business outcomes, questions have been raised about what constitutes "good" engagement during the early stages of the mine life cycle. Mine design outcomes can have significant positive or negative implications for nearby communities, but what tactics are most effective for soliciting that input? Are there examples that can be shared to support the community of learning around these issues? And given the level of uncertainty that mineral exploration projects face[3], where on a spectrum of engagement (from doing the minimum required to collaborative decision making) should exploration companies aim to be?

[2] EY 10 Business Risks facing Mining and Metals (2018/2019)

[3] In general terms, 500 – 1000 grassroots exploration projects will result in 100 targets for advanced exploration; 10 of which will qualify as development projects, and one of which will become a producing mine

These are some of the questions considered in this report. The findings arise from a nine-month research project, funded by the Canadian Social Science and Humanities Research Council (SSHRC). The project was supported by Erdene Resource Development Corporation, the Environment and Social Responsibility Committee (ESRS) of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) and the Society and Environment Committee of the Australian Institute of Mining and Metallurgy (AusIMM).

The research is part of ongoing investigations into applied approaches to corporate social responsibility (CSR) within the global mining sector being undertaken by researchers at University of British Columbia's School of Public Policy and Global Affairs and the Norman B. Keevil Institute of Mining Engineering.

Research Methodology

The research employed multiple methods (Figure 1) to consider the following questions:

- What strategies for engagement are most often used by mineral exploration companies?
- Where on a spectrum of engagement from comply to empower do most companies' approaches fit?
- What opportunities and challenges confront companies when executing engagement initiatives?

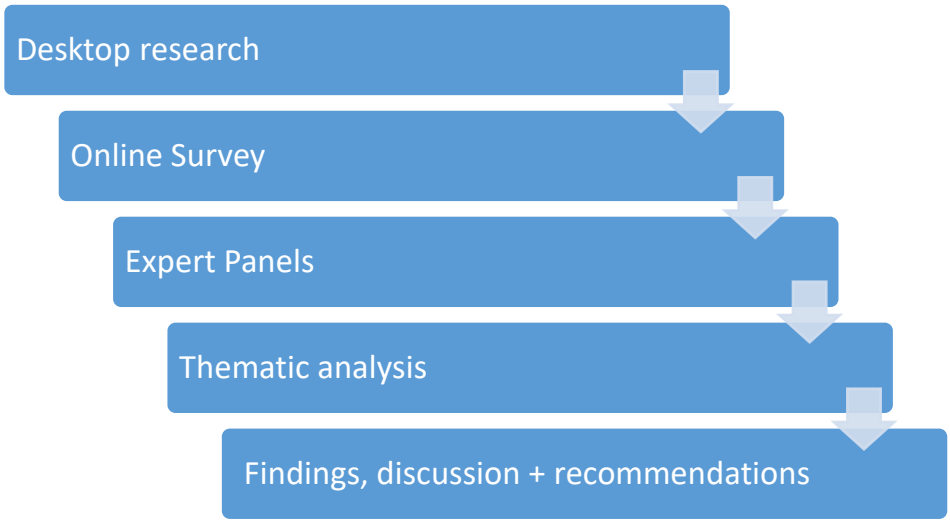


Figure 1. Overview of research methods.

Desktop Research

The research began with a scan of scholarly articles and practitioner literature examining engagement theory and approaches. Documents reviewed included journal articles, as well as reports and publications of mineral exploration and mine development associations. Recognizing that sectors other than mining might have valuable insight to share on the topic of effective engagement, guidance was sought from other industries, such as oil and gas, and from third party groups overseeing engagement such as the International Finance Corporate (IFC), the European Bank for Reconciliation and Development (EBRD), World Business Council for Sustainable Development (WBCSD), and from consultancies such as Business for Social Responsibility (BSR).

Material was classified into two groups: tools and guides, and standards. The material deemed of most relevance to prospective readers is included in Appendix A.

Findings from the literature review informed the development of a survey questionnaire, conducted online using the Qualtrics platform.

Online Survey

To gain insight to current practices in community engagement/consultation in mineral exploration and mine development, and to applied approaches to stakeholder and community engagement, an online survey was conducted. The survey targeted a purposefully selected group of potential respondents: members of the CIM's Environment and Social Responsibility Society and members of AUSIMM's Social and Environmental Society.

Eighty-eight people responded to the survey with approximately 50% coming from each CIM and from AUSIMM. Although a small sample, respondents had a high degree of expertise: 60% (CIM) 80% (AUSIMM) respondents have personal experience designing a mine within the last 10 years.

Expert Panels

To synthesize knowledge from the online survey results, we held two expert panels: one with academics (N=10) and one with community engagement practitioners (N=11). Participants were purposefully selected by the research team with a majority having more than 10 years of experience in community engagement. The objective of the panels was to:

- Secure specialized input and opinion for categorizing early engagement tactics
- Explore additional engagement options/ideas currently in use
- Gain consensus on discrete implementation strategies and their relative importance and feasibility at the advanced mineral exploration and design stages of mining projects.

The sessions, each lasting about two hours, were conducted under Chatham House rules, meaning that participants were free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

Upon arrival at the session, each panelist received a stack of cards listing an engagement tactic (listed in Appendix B), and a classification chart. We selected the tactics for examination based on the results of questions included on an online survey, and complemented these ideas by any "best" practice examples highlighted in the literature review.

Working individually, each panelist sorted the cards into two piles: engagement tactics with which they were familiar; and tactics that were not familiar. Unfamiliar cards were set aside. Next, each panelist sorted the cards with familiar tactics into the appropriate "zone" on a wall-mounted classification chart, adapted from the International Association of Public Participation's engagement spectrum (Figure 5).

Once panelists posted their cards, small groups worked together to identify any additional tactics in common use. The panelists then regrouped to debrief, creating an opportunity for an interactive dialogue amongst the experts to discuss the workshop findings.

Themes and Analysis

Members of the research team met to review the findings of the online survey and expert panels. A consensus building exercise was used to cluster individual researchers' observations and explore common themes.

Findings, Discussion and Recommendations

Salient findings are discussed in the following pages and additional resources are found in the appendices.

Questions on the research methods and findings can be addressed by any member of the research team. Contact emails are listed on page ii.

The Results

The Online Survey: What We Learned

Finding 1: The biggest challenge to engagement is earning stakeholder trust

The lack of trust that currently exists between the mining sector and resource-rich communities was consistently noted as an impediment to effective engagement.

Respondents suggested that low trust is driven by:

- The mining industry's reputation and anti-mining sentiment
- Misinformation in the public domain exacerbated by the increasing influence of social media
- A perceived lack of transparency on the part of industry
- Misalignment between project timelines and the time required for community engagement
- A lack of resources (both financial and trained personnel) to support effective engagement
- Mining as a locally unwanted land use. As one respondent put it, "Mining represents a very visual, large-scale landscape change and so for people with a connection to these landscapes a mining proposal can be very unsettling for them."
- Concerns about displacement and land access both for local residents and, in many regions of the world, for artisanal and small-scale miners (ASM).

Assessment and recommendations

- Sharing information and being transparent in decision making contributes to trust building.
- Good record management is required to ensure any information shared is trustworthy.
- To manage expectations, be clear about the approach to engagement that is being used. See Figure 5.

Quotes

"It's a long term investment to build a level of understanding about mining and environmental issues, and building trusting relationships. This requires face time and genuine efforts to understand community culture and aspirations. Communities are often rightly concerned that some mining proprietors are only interested in making fast bucks. Sometimes mining companies are also very patronizing in my opinion. This requires a concerted effort to change mindsets within companies. This transition is underway, but lack of trust in many communities runs deep."

"One big challenge is for companies to open themselves up to "manageable" levels of vulnerability with community. Unless there is a willingness to actively listen to community and understand their concerns and aspirations at a meaningful level, the pathway to trust building and a social license will be an arduous one."

Survey respondents' suggestions for building trust and credibility

"It's critical to start the engagement process as early as possible, ideally way before there's even a project on the table."

"*If communities are involved in the early design stage - impacts can be minimized and uncertainty can be mitigated."*

"Communities often feel like they lack power, and giving them decision making power would help alleviate the imbalance."

"Switching from paradigm of only sharing design information after a single option has been selected (e.g., after PFS). This is usually too late to meaningfully incorporate community feedback. Engineers responsible for design need to appreciate that the risks of sharing multiple design options with communities to get feedback (e.g., raising unreasonable expectations) are generally far out-weighted by the benefits of this earlier substantive engagement (e.g., greater trust, earlier identification of issues of disagreement [before EIA/permitting]"

"Go beyond the bare minimum and engage more with the affected communities. Sites where this has happened have had better outcomes in terms of community engagement and support for projects."

"*Maintaining the same level of engagement from exploration to project construction to mine operation as the teams involved in the community engagement change over time. Important to record and respect engagements made to the community throughout these phases to keep credibility."*

"[To build trust] look for points of synergy with local goals and environmental management. For example, power generation alternatives, shared utilities - power, water, sewerage treatment; employment, and local service providers.

Finding 2: Many companies are negotiating formal agreements with communities of interest

- 83% of respondents indicated that the companies for which they work have agreements in place that have been negotiated between the company and the community or the company and rights holders.
- Formal agreements are viewed as an important tool for collaboration and trust building.

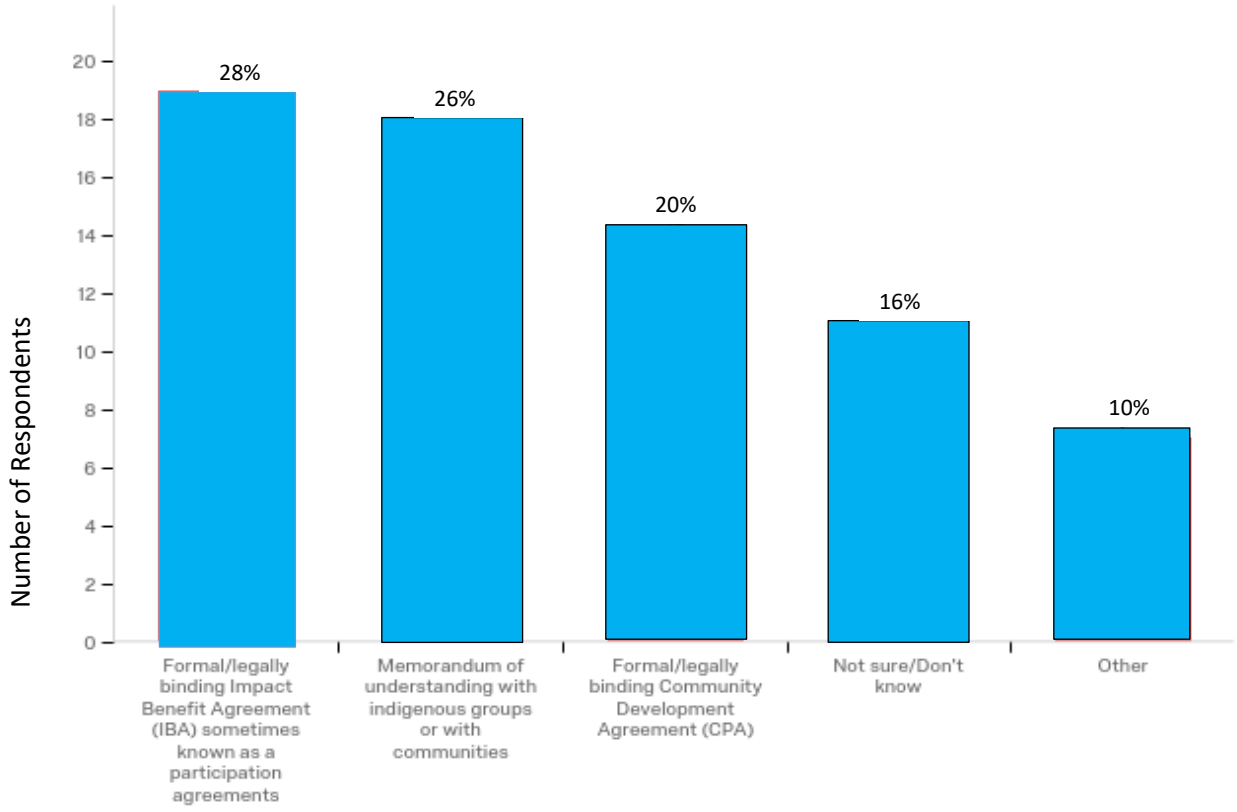


Figure 2– Does your company have agreements in place that have been negotiated between the company and community, or the company and rights? (Please select all that apply)

Assessment and recommendations

Formal agreements are typically negotiated between a small group of company-community representatives.

- To demonstrate the ability of the mineral exploration or mining project to deliver social value, and secure the so-called social license to operate, engagement with the broader community is necessary: formal agreements are neither a substitute nor a proxy for community engagement.

Finding 3: Key Performance Indicators (KPIs) need improvement

- 33% of respondents record that community relations personnel have KPIs tied to community engagement, yet very few respondents (12%) work for companies that have key performance indicators for all company personnel.
- For those who indicate their company has some form of KPIs, the majority of the metrics identified by respondents are output oriented (number of consultations held, number of unresolved complaints, local employment numbers) versus outcome oriented (examples offered included training success rate, local procurement, economic development, diversity and inclusion).

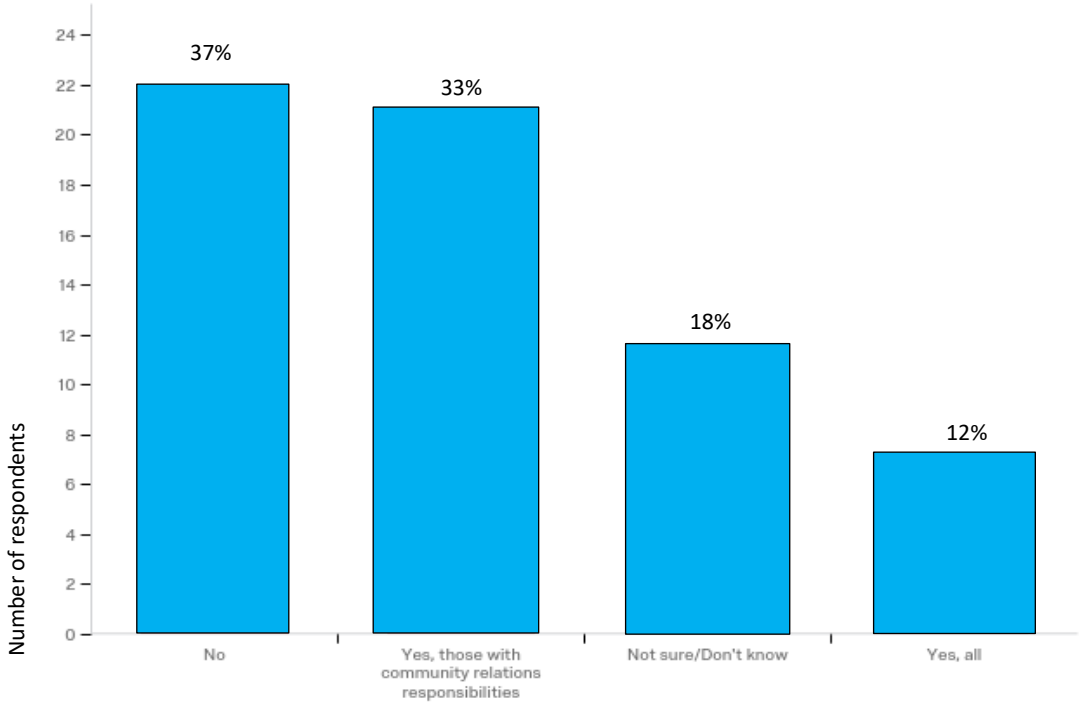


Figure 3 -- Q 11company personnel have key performance indicators (KPIs) tied to community engagement (or some equivalent such as social performance, stakeholder engagement, etc.)?

Assessment and recommendations

Considering a large number of respondents (37%) work for companies with more than 500 employees this finding on KPIs is disconcerting. It is assumed that core function areas such as production and processing employ some form of KPIs within a performance management system. If KPIs are not established for community relations it suggests engagement is not perceived within

the company as a core function – a finding that has been lamented in academic literature[4] and by engagement personnel working in the mining sector.

- Establishing KPIs on community engagement for all personnel is a way to illustrate the strategic value of engagement and to incentivize improved performance.
- KPIs should also be tied to measurable outcomes rather than annual outputs (E.g. retention of employees who "graduate" from local training programs versus the number of people who complete local training programs).

Finding 4: Tracking commitments is ad hoc for many

- Approximately 58% of respondents indicated that commitments made to communities by companies are tracked using an Excel spreadsheet or some form of community engagement software. However, 17% of respondents were not sure or did not know, and a further 17% indicated that tracking commitments occurs informally within the team, suggesting a lack of a formal commitment register.

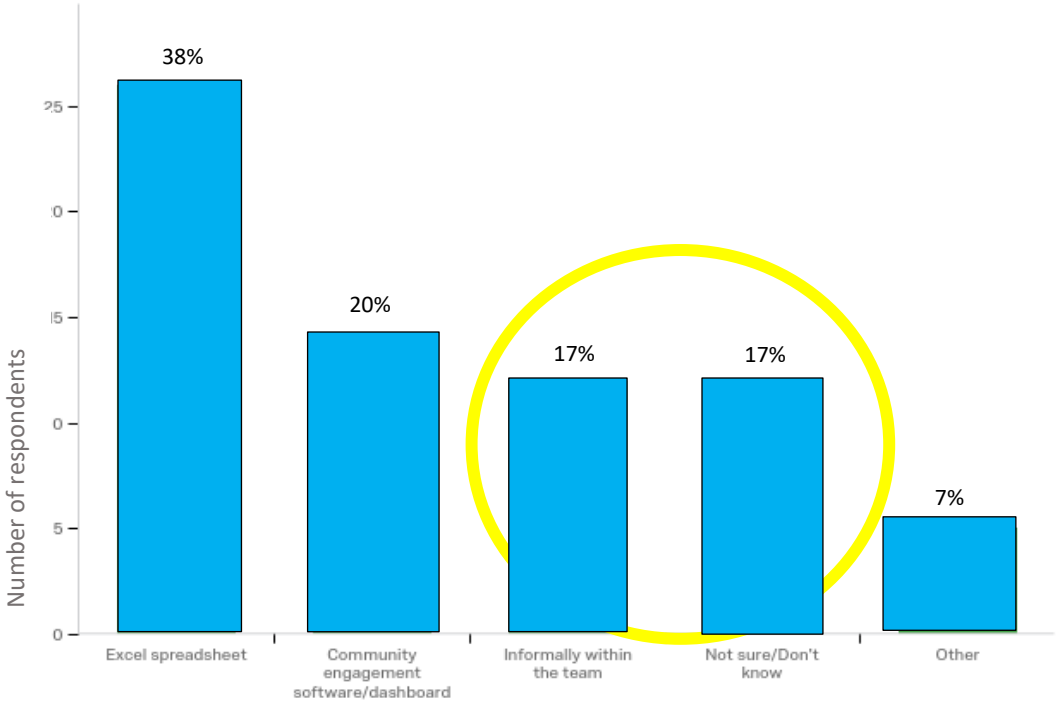


Figure 4 - What do you find is the most common approach to tracking commitments - or promises - made to communities where mining is planned/taking place?

[4] See for example, Kemp, D., & Owen, J. (2013). Community relations and mining: Core to business but not "core business. *Resources Policy, 38*(4), 523-531.

Assessment and recommendations

In an industry where mergers, acquisitions, and takeovers are common, and where mining personnel have a high degree of mobility, the lack of a formal mechanism to track community commitments creates vulnerability. Community members and associated stakeholders will remember commitments made and if those are not fulfilled companies can expect to hear about it, or see evidence of it in social opposition to the project.

- As noted earlier, trust is a challenge in the mining sector. A commitment registry is a tool to engage stakeholders and to enhance transparency. A publicly available record also enables those new to the project to review past action and future obligations: essentially ensuring the company and its communities of interest are working from the same data.
- The key recommendation is that a shared engagement record should be considered a site asset. Should the project be offered for sale or become subject to acquisition, the value of the engagement record/commitment registry should be assessed the same manner as other assets appearing on a deal sheet.

Finding 5: Community input to mine design remains limited

A central objective in this research was to assess what approaches are most effective for engaging community members in decisions about the design of mines. We asked, "How likely would it be for an exploration or mining company to ask residents of nearby communities for feedback on mine design decisions (for example, infrastructure siting, energy supply options, tailings storage facility placement, etc.)?"

Respondents were asked to respond to this question using a Likert scale of 1 (very unlikely) to 5 (very likely): the results are almost equally split with 33% of respondents indicating that the company they work with would be likely to engage on these sort of questions and 35% suggesting it is currently unlikely that the companies with which they work would engage community representatives on important mine design decisions.

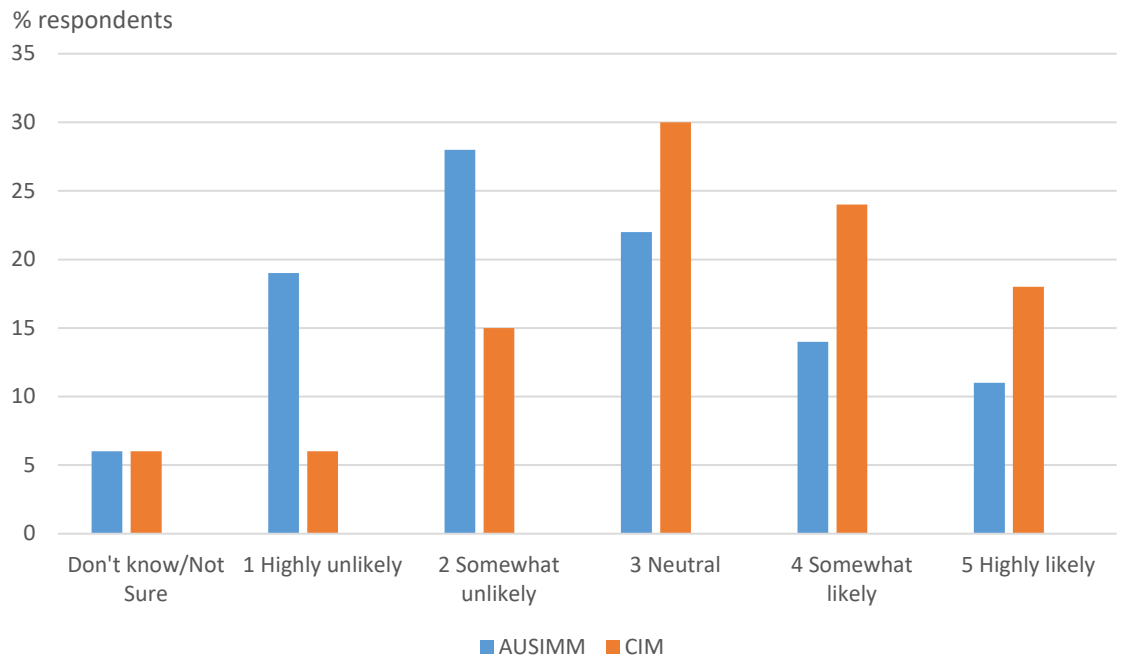


Figure 5— Q21 In your experience how likely would it be for an exploration or mining company to ask representatives of nearby communities for feedback on mine design decisions (for example, infrastructure siting, energy supply options, tailings storage facility placement, etc.)?

Assessment and recommendations

This question is one of the few places in the research findings where there is a difference in response based on geography. A majority of respondents to the CIM survey selected 4 or 5 on the Likert scale, indicating a higher degree of likelihood that their companies would engage on these decisions - 42% versus only 24% of AusIMM respondents.

- Since design outcomes can have significant positive or negative implications for nearby communities, local input to certain design decisions can support outcomes that have a higher degree of community acceptance. These mutually beneficial outcomes can therefore reduce the risk of conflict and of costly changes later in the project. The questions discussed above are further examined by considering how best to classify the mineral exploration and mining sectors approach to engagement.

Finding 6: There is no single or dominant approach to community engagement

To benchmark the current approaches to engagement by mineral exploration and mining companies, a spectrum of engagement developed by the International Association of Public Participation was used. This practical tool aligns with academic theory on the ladder of citizen participation[5].

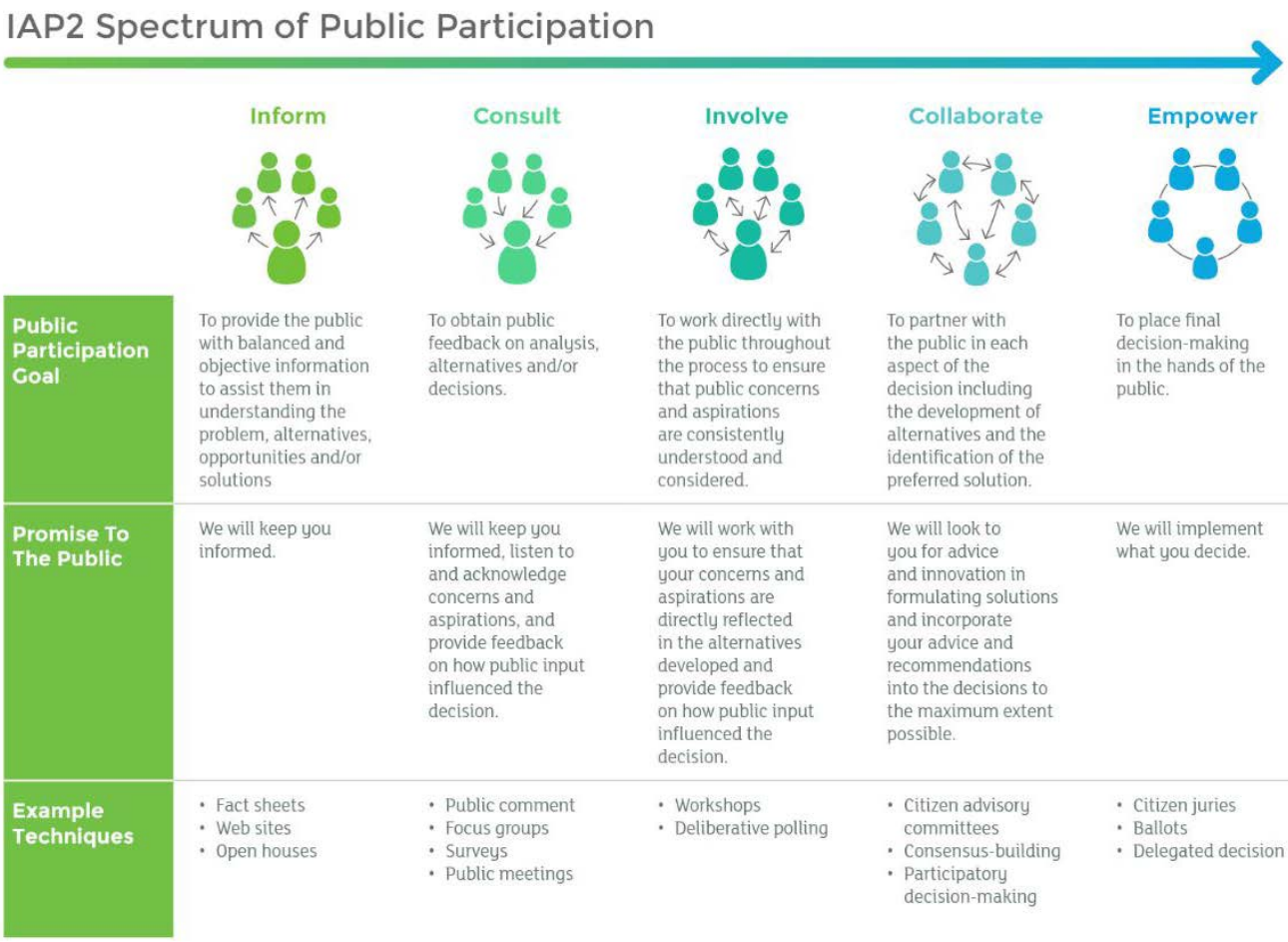
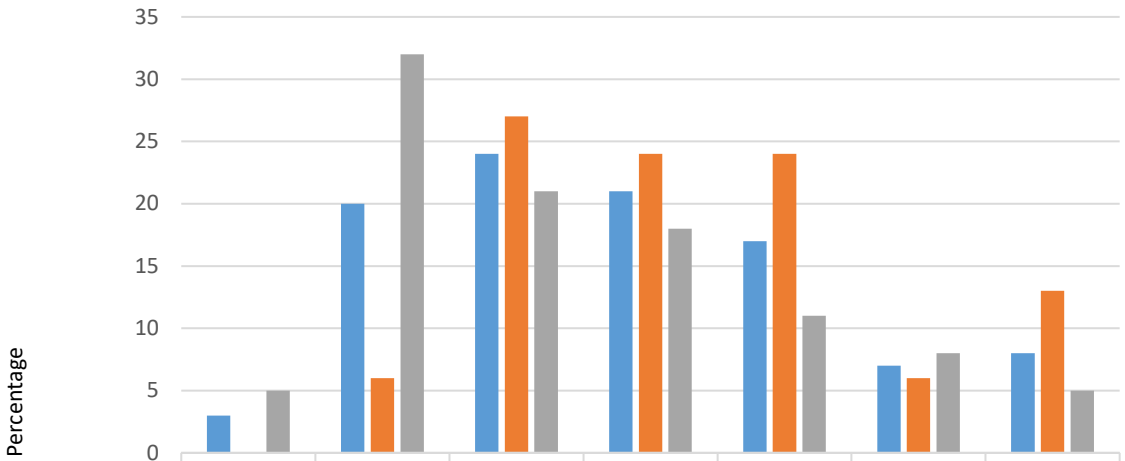


Figure 6 --- The International Association of Public Participation's Spectrum of Engagement (2004) www.iap2.org

[5] For an early example, see Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4): 216-224.

We asked respondents to the online survey, "Based on your experience, how would you describe the most common approach to community engagement within the mining sector?" Three changes were made to the categories represented in the IAP2 spectrum to align the spectrum with perceived levels of applied practice in the mining sector:

- Empower was removed as there is little evidence in the global mining sector of project decisions being placed in the hands of the public.
- Two categories were added on the left-hand side of the spectrum: avoid (undertake measures to avoid and limit engagement) and comply (minimize engagement to no more than that which is required under applicable laws and regulations).



	Avoid	Comply	Inform	Consult	Involve	Collaborate	Combination
TOTAL %	3	20	24	21	17	7	8
CIM %	0	6	27	24	24	6	13
AUSIMM%	5	32	21	18	11	8	5

Figure 7 --- Based on your experience, how would you describe the most common approach to community engagement within the mining sector?

Assessment and recommendations

The results suggested approaches to community engagement are spread across the spectrum with some geographic differences in opinion. Canadian respondents tended to view the industry's approach is fairly equally divided between inform, consult or involve. Australian respondents believed there was a wider range of approaches right across the spectrum. The findings raise some interesting questions for a future research project. For example,

- Are there differences in regulatory requirements that are driving different engagement approaches?
- Do different stakeholder expectations for engagement impact placement on the spectrum?
- Is one set of respondents more realistic and the other more optimistic?

Finding 7: Engagement tools skew towards the tried and true

Having benchmarked where most companies' approaches to engagement are believed to be on the spectrum of engagement, we then asked survey respondents to identify up to three approaches felt to be the most effective community engagement tools. Given the differences in the perceived placement on the spectrum of engagement it is surprising to find that CIM and AUSIMM respondents were aligned in the tactics nominated as most effective. (The one significant difference was that 12% of AUSIMM respondents felt site tours were an effective tool while only 4% of CIM members shared that opinion.)

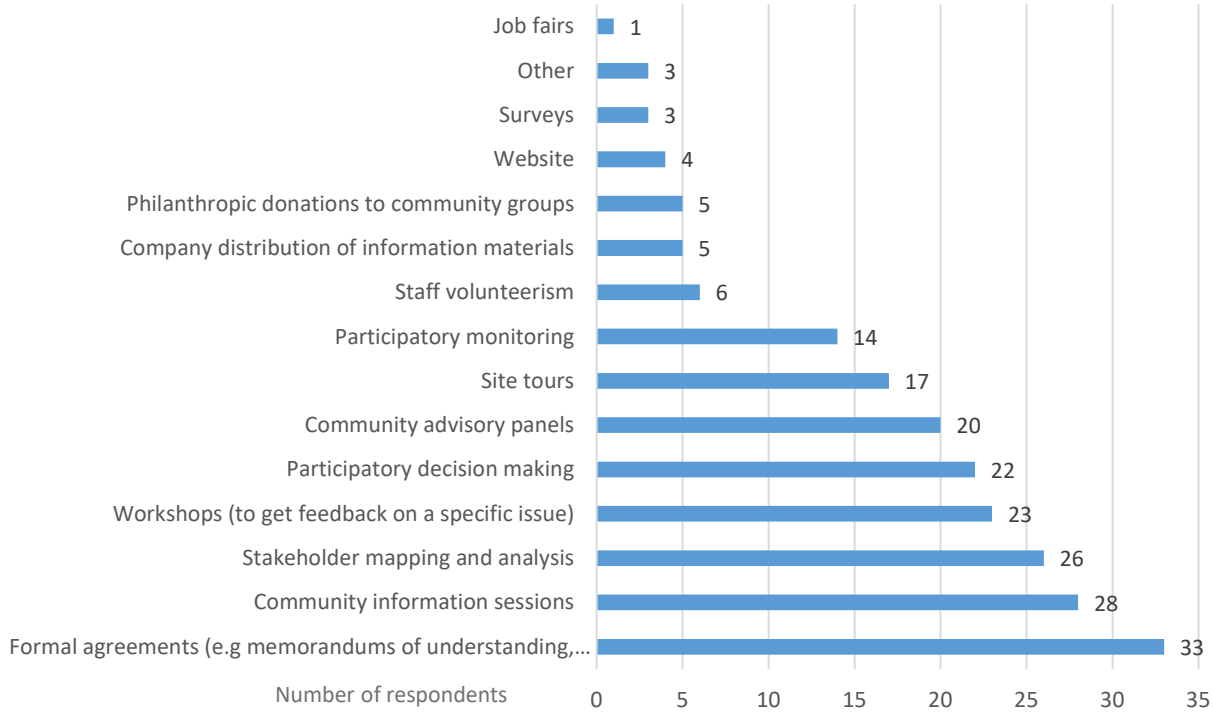


Figure 8 – Q19 From the list below, please select up to three approaches that you feel are the most effective community engagement tools?

Assessment and recommendations

It could be argued that two of the top choices – formal agreements and stakeholder mapping – would not normally be considered engagement tactics. Stakeholder mapping is most frequently done by companies to inform their activities. Formal agreements are typically negotiated by a small group of experts or elites.

- We hypothesize that the selection of these two tactics reflects practitioners' belief that engagement is a business imperative and should be formalized by identifying those who should be engaged and establishing an agreement with those parties.

There was a surprise for the researchers in response to the question asking respondents to identify the most effective engagement approaches. We had anticipated that the "other" category would generate a large list of new tactics, yet only three were offered and each of these ideas represents a known truth in stakeholder engagement theory rather than an innovation in approach: talking to people in a non-confrontational setting; employees building relationships with community, ongoing personal connections, tailoring the communication style to the individuals; and one on one conversations in the community.

The findings raise some interesting questions. Does this suggest that:

- What types of engagement tactics could further facilitate improved stakeholder engagement? Is innovation required? Or, are companies securing the type of feedback they require using traditional engagement approaches?
- Are existing "tried and true" engagement tactics sufficient to serve their purpose (e.g. already meeting the needs of stakeholders)?
- If we asked community stakeholders to identify the most effective tactics for engagement, would they provide the same answers as company respondents?

To consider these questions and to assess where these tactics fit on the spectrum of engagement, we convened a panel of engagement experts.

The Expert Panel

The expert panel was used to synthesize knowledge from the online survey results about the most effective engagement tactics. As noted on page 9, two panels were held. One panel engaged 10 academics (A on Table 1) and the other 11 practitioners (P on Table 1). All practitioners had a minimum of five years of applied experience in stakeholder engagement in the mineral exploration or mining sector; nine of the 11 had more than 10 years of experience

In both cases, experts were offered a deck of cards, each listing an engagement tactic. To help ensure a common approach, a lexicon was provided to define each tactic (Please see Appendix B). Table 1 lists the engagement tactics selected by +10% of online respondents in response to Q19 (Figure 8). When classified by the expert panel, these tactics were placed in a number of different categories on the spectrum of engagement, highlighting the diversity of classification perspectives and the related challenge of attempting to define "best" practice.

TACTIC	INFORM		CONSULT		INVOVLE		COLLABORATE		EMPOWER	
	A	P	A	P	A	P	A	P	A	P
Formal agreements		1		1		2	8	4	2	1
Community information sessions	10	7				4				
Stakeholder mapping	2	3	5	1	2	3				
Workshops			2		1	1	4	4	1	
Participatory decision making					1	1	3	3	4	5
Site tours	7	6		1	2	2		1		
Community advisory panels			3	1	3	2	3	4	1	4
Participatory monitoring			1		4	5	1	1	2	1

Table 1 – Expert classification of select tactics across the spectrum of engagement. A= academic panel members; P = practioner panel members

Assessment and Recommendations

The panels demonstrated that most engagement tactics can be placed anywhere along the spectrum depending upon the intent of the organization leading the engagement process. For example, a site tour can be an "inform" activity if led by a tour guide. However, if the site tour is set up to seek feedback on a specific issue, is led by a subject matter expert, and involves a community advisory panel it could become a collaborative or even an empowering tactic.

We also learned that definitions are important. For example, "workshops" and "advisory panels" may mean one thing to one person and something quite different to another. To avoid confusion and to mitigate the risk of setting expectations that will not be fulfilled, it is important - once again - to clarify intent.

As we had done with online survey respondents, we asked our expert panels to identify engagement tactics that were not included in the classification exercise and that would be classified as collaborate and /or empower initiatives. While there was no consensus from the experts, ideas endorsed by more than one person included:

- Design basis development
- Adaptive environmental assessment management
- Joint management plans (wildlife, fish, access, socio-economic, community well-being etc.)
- Shared ownership/joint ventures
- Community-led technical reviews (shadow decision boards, ESIA, etc.)

It was also noted that citizen science could be used to guide more collaborative decision-making.

Quotes

"The quality of the practice and its implementation is key in order to place the practice on the spectrum."

"The process/method as it applies depends upon the intent of the organization. That is a participatory process can either sit within involve, collaborate, or empower depending on how it is applied as well as the underlying intention of the organization.

"Many tactics could be placed in multiple categories depending on how they are executed and who is leading."

"A huge determining factor in the success of an engagement process is resourcing – on both sides – it won't work if the community you are engaging has no capacity"

"In my experience, community members see a disconnect between what they are promised during approval stages and what is delivered during operations. This is amplified further when operations make claims about their great environmental credentials and achievements but is in contrast to what local communities see on the ground or what they would consider great."

Conclusions: What did we learn?

The research set out to answer three questions:

1. What strategies for engagement do mineral exploration companies most often use?
2. Where on a spectrum of engagement from avoid to empower do most companies' approaches fit?
3. What opportunities and challenges confront companies when executing engagement initiatives?

We learned that a wide variety of engagement tactics are being used by mineral exploration and mining companies. Examining the findings from the online surveys and expert panels, we conclude that "best practice" is highly contingent upon:

- The **intent** of the company organizing the engagement activity. Where a tactic fits on the engagement spectrum depends on whether a company plans to inform, consult, involve, collaborate, or empower its communities of interest.
- The **resources** available to execute the chosen tactic. The budget is relevant as is the human capital: trained engagement experts may be able to elevate tactics such as community information sessions to be collaborative; others may believe these events are intended only to inform communities of interest of the company's plans.
- The **time** allocated for engagement and the **quality** of the resulting program. Building trust and relationships are difficult to schedule into a project Gantt chart. Rushing engagement to meet timelines set by project teams frequently leads to poor outcomes. Short timelines can also create a perception that the company is most interested in checking the box on engagement so that permits and regulatory approval can be secured.
- Community **readiness** – the capacity of the community to participate – will also affect engagement approaches and outcomes.

Current approaches to engagement span a spectrum from avoid to empower. Most companies seem to acknowledge the importance of some form of engagement and we predict mining's approach to engagement will continue to evolve in the coming years. The progression along the spectrum of engagement may arise from individual leadership, a redefined corporate purpose, as a risk management strategy, or in response to increasing pressure from investors to deliver value to all stakeholders versus just corporate shareholders. Regardless of motivation, the value of taking a more collaborative approach was recognized by both online survey respondents and expert panel members and is consistent with stakeholder engagement theory.

There are challenges to overcome. Perhaps the most difficult is building trust in the mining industry that seems not to be trusted to act in the best interests of society. Trust is built on three pillars: ability, benevolence, and integrity. Ability is defined as possessing skills, expertise, and competency within a specific domain – which geologists and mining engineers can demonstrate. Benevolence is based upon altruism, philanthropy, loyalty, and the notion of "do no harm" – characteristics that we believe many in the mining industry endorse. Integrity is built by actions congruent with words and by consistent behaviour – something that can be challenging in an industry where people and companies often change over the life of a mining project. Trust is contingent on the inter-relationship between these three characteristics. We suggest effective stakeholder engagement is the foundation for trust building and in the next section outline some recommended steps for companies to follow.

Steps to effective engagement

Despite the challenge of defining best practice, there are steps to be taken when mineral exploration and mining companies are designing engagement strategies that support effective processes.

Prepare

1. Determine the company's approach to engagement. Be clear internally about where on the spectrum of engagement the company's approach fits. Communicate that position to engagement participants to avoid creating expectations that cannot be fulfilled.
2. Set goals, objectives, and key performance indicators to measure the outcomes of engagement. "Best" practice will see more KPIs tied to long-term outcomes rather than annual engagement outputs, and will see KPIs on engagement established for all company personnel not just for community relations personnel.
3. Develop policies and procedures to guide engagement. Regardless of the geographic jurisdiction in which the project is located having the following procedures available (and translated into the local language) is important:
    a. Response or feedback mechanism (sometimes referred to as a grievance mechanism)
    b. Local hire
    c. Local procurement
    d. Human rights
    e. Contractor alignment

    (Of note, 42% of online survey respondents do not have or do not know if their company has a policy requiring contractors to mirror company approaches to community engagement. If contractors are acting in one way and company personnel in another project risk is created.)

4. Research communities of interest and identify those with whom to engage, where there may be opportunities for partnerships or collaboration opportunities, where there may be points of alignment with the community's own vision for its future and/or sustainable development.
5. Involve employees across the company. Stakeholder engagement should not be siloed to one department. It needs to be a business priority. Employees can be the company's best ambassadors if they understand the business imperative and the desired outcomes of engagement.

Engage

1. Communicate clearly and fairly to people what they can and cannot influence.
2. Allow sufficient time for stakeholders to prepare, to participate, and to provide feedback.
3. Co-create opportunities for feedback with communities of interest.
4. Identify areas for joint decision-making and/or co-development of engagement processes.
5. Document the engagement process and areas where changes have been made to the project design due to stakeholder feedback.
6. Survey stakeholders to determine the effectiveness of the approach

Report

1. On engagement outcomes, any project changes made as a result of engagement.
2. On the ways in which the engagement program will change during the next year or operational period.

Future research

Having attempted to benchmark the mineral exploration and mining industry approach to community engagement, an interesting future research project would be benchmark "effective" engagement from the perspective of community stakeholders and rightsholders.

There are also interesting questions to explore related to trust, the "social chain of custody", when to engage communities of interest in joint decision making, and how best to solicit input to technical decisions from those with limited knowledge of mineral exploration or mining but with significant local and/or traditional knowledge.

Questions and comments can be directed to any member of the research team. Please see contact details on page ii.

Appendix A: Resources: Tools and Guides

We asked respondents to the online survey: If you have experience using any evaluation tools or performance frameworks, please tell us which you would recommend? Here are the recommendations in order of the number of mentions.

1. International Finance Corporation (IFC) - Stakeholder engagement: A good practice handbook for companies doing business in emerging markets (2007)
2. ICMM - Stakeholder research toolkit and the- Understanding company community relations toolkit
3. Mining Association of Canada – Towards Sustainable Mining (TSM)
4. Borealis stakeholder engagement software
5. CSIRO Local Voices
6. Other:
    - European Bank for Reconciliation and Development (EBRD) - Performance Requirements and Standards
    - International Association for Impact Assessment (IAIA) - Social Impact Assessment Guide (2015)
    - Global Reporting Initiative (GRI) – GRI and Sustainability Reporting subset includes stakeholder engagement. Mining Sector Guidance
    - Project Pro

Additional Resources Evaluated

1. Guides

Business for Social Responsibility - Five Step Approach to Stakeholder Engagement

Canadian Energy Mines Ministers - Good Practices in Community Engagement and Readiness – Canadian Energy and Mines Ministers Conference 2014/second edition November 2016

Devonshire Initiative - Beyond Zero Harm Framework: A Participatory Process for Measuring Community Well-being (2016)

Engineers without Borders (EWB) - Partnerships in Procurement: understanding aboriginal business engagement in the Canadian Mining Industry

International Association of Public Participation (IAP2) - Spectrum of public participation

Intergovernmental Forum on Mining (IGF) - Local content policies in the mining sector: Scaling up local procurement (2019)

International Petroleum Industry Environmental Conservation Association (IPIECA) - Social investment practionner's note

IPIECA - Creating successful sustainable social investment

Network for Business Sustainability (NBS) - Community engagement guide: A getting started toolkit for exploration and development companies (2014)

Natural Resources Canada (NRCAN) - Exploration and mining guide for Aboriginal communities

Organization for Economic Cooperation and Development (OECD) Due diligence guidance for meaningful stakeholder engagement in the extractive sector

Prospectors and Developers Association of Canada (PDAC) E3Plus

PDAC - First engagement – A field guide for explorers (2015)

United Nations (UN) Guiding Principles on Business and Human Rights (2011)

US Environmental Protection Agency (EPA) - Stakeholder Guide: Engaging stakeholders n your watershed (2013)

Victoria Government Department of Sustainability and the Environment – Effective Engagement: building relationships with community and other stakeholders. Book 3: The engagement toolkit

2. Standards

AccountAbility AA1000 –Stakeholder Engagement Standard

OECD - Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas

Responsible Mining Assurance - Standard for Responsible Mining

Sustainability Accounting Standards Board (SASB) – Metals and Mining

3. Video resources

https://ecan.govt.nz/your-region/your-environment/water/canterburys-approach-to-water-management/

- Good example of multiple levels of communication and communicating technical information in a collaborative, community-led approach to environmentally-sustainable water management.

Appendix B:

Lexicon of engagement tactics evaluated by the expert panels

Definitions: Effective Engagement: Building Relationships with Communities and other Stakeholders. Book 3. (2005) Victoria Department of Sustainability and the Environment/IAP2/ Wikipedia

Citizen juries	Citizen juries involve the wider community in the decision-making process. Citizen juries use a representative sample of citizens (usually selected in a random or stratified manner) who are briefed in detail on the background and current thinking relating to a particular issue, and asked to discuss possible approaches.
Community information/briefing/ dialogue sessions	Community events intended to provide project information and raise awareness about particular issues. Also called community forums or open houses: People can drop in and obtain information at their convenience. Usually, the open house includes display information and presentation material complimented by printed handout materials and the presence of project staff to meet with and answer people's questions one-on-one.
Community mapping/profiling	Intended to develop an understanding of the people in a geographical area or a specific community of interest. Profiles can illustrate the make-up of a community and could include information about the diversity within the community, their history, social and economic characteristics, how active people are (i.e. the groups and networks used) and what social and infrastructure services are provided.
Community relations audits	A formalized process to audit a company's community relations. The audit is undertaken by a third party and involves an assessment of company produced materials as well as one-to-one interviews and/or focus groups with local stakeholders and rightsholders.
Community visioning	A process to give residents, business owners, local institutions, and other stakeholders the opportunity to express ideas about the future of their community. Through a series of meetings, workshops, surveys, and growth-scenario comparisons facilitated by local leaders, participants create a community vision—a written statement that reflects the community's goals and priorities and describes how the community should look and feel in years to come.

Design charrettes/workshops	A multi-disciplinary workshop to facilitate open discussion between major stakeholders. A team of design experts meets with community groups to gather information on the issues that face the community. The charrette team then works together to find design solutions that will result in a clear, detailed, realistic vision for future development.
Electronic democracy	People can use email or websites to register their opinions on proposed developments, environmental impact statements, design choices etc.
Focus groups	Focus groups are used for exploratory studies, and the issues that emerge from the focus group may be developed into a questionnaire or other form of a survey to verify the findings.
Formal agreements: MOUs, IBAs, Pas, CDAs	Agreements signed between communities of interest and the project proponent. The content and nature of the agreement varies dependent upon the stakeholders engaged and the stage of the project. In general, agreements provide some form of recognition and/or compensation for the use of the land by the mining company.
Information hotline	Offers pre-recorded information on a project via the telephone and/or access to project team staff members who can answer questions or provide additional information and assistance.
Information handouts: "fact" sheets, newspaper inserts, newsletters	Produced by the proponent to deliver basic information about the proposed project. Can be disseminated via a local newspaper or mail drop. May include feedback opportunities, and may outline opportunities for public involvement.
Information repositories	Public place where project information is stored so that members of the community can access the information. Popular places for information repositories include public libraries, schools, city halls and Council offices. Typically, the repository should house all the project information appropriate for public access and act as a dispatch centre for project information. Provides publicly available documentation of decisions.
Inter-active models/virtual reality	A way to enable local stakeholders to "see" the project both surface and underground design considerations and options
KPIs for engagement	Key performance indicators set for company personnel to measure engagement effectiveness.

Multi-year area based planning	Multi-year area-based (MYAB) planning in the mineral exploration/mining sector is the practice of authorizing exploration activities, typically for up to five years within identified activity area(s). Objectives of the approach include: outlining the scope of work in a manner that facilitates meaningful discussion regarding possible impacts to Indigenous rights while reducing the administrative burden on communities; and improve communications with communities of interest; assist in cumulative effects assessments.
Local procurement	The process of obtaining personnel, services, supplies, and equipment from local sources including Indigenous businesses.
Participatory decision making	A process to enable participation in organizational decision-making.
Participatory monitoring	Participatory monitoring (also known as collaborative monitoring, community-based monitoring, locally based monitoring, or volunteer monitoring) is the regular collection of measurements or other kinds of data (monitoring), usually of natural resources and biodiversity, undertaken by local residents of the monitored area, who rely on local natural resources and thus have more local knowledge of those resources.
Prioritization matrix	A technique used to achieve consensus within a specific group of participants about an issue. The matrix helps rank problems or issues (usually generated through brainstorming or other techniques) by a particular criterion that is important to the project, as defined by the participants. A prioritization matrix can use whatever resources are available to create a table of issues and boxes for participants to cast their 'votes'
Project website	A dedicated website that contains project information, announcements and documents that can use various media formats. A website aims to make information available, freely and in forms that are easily accessible (click and go information, multimedia options for accessing information, and/or the option of collecting and/or providing feedback).
Questionnaires/Comment sheets	Means to provide information on which to base decisions about planning and management